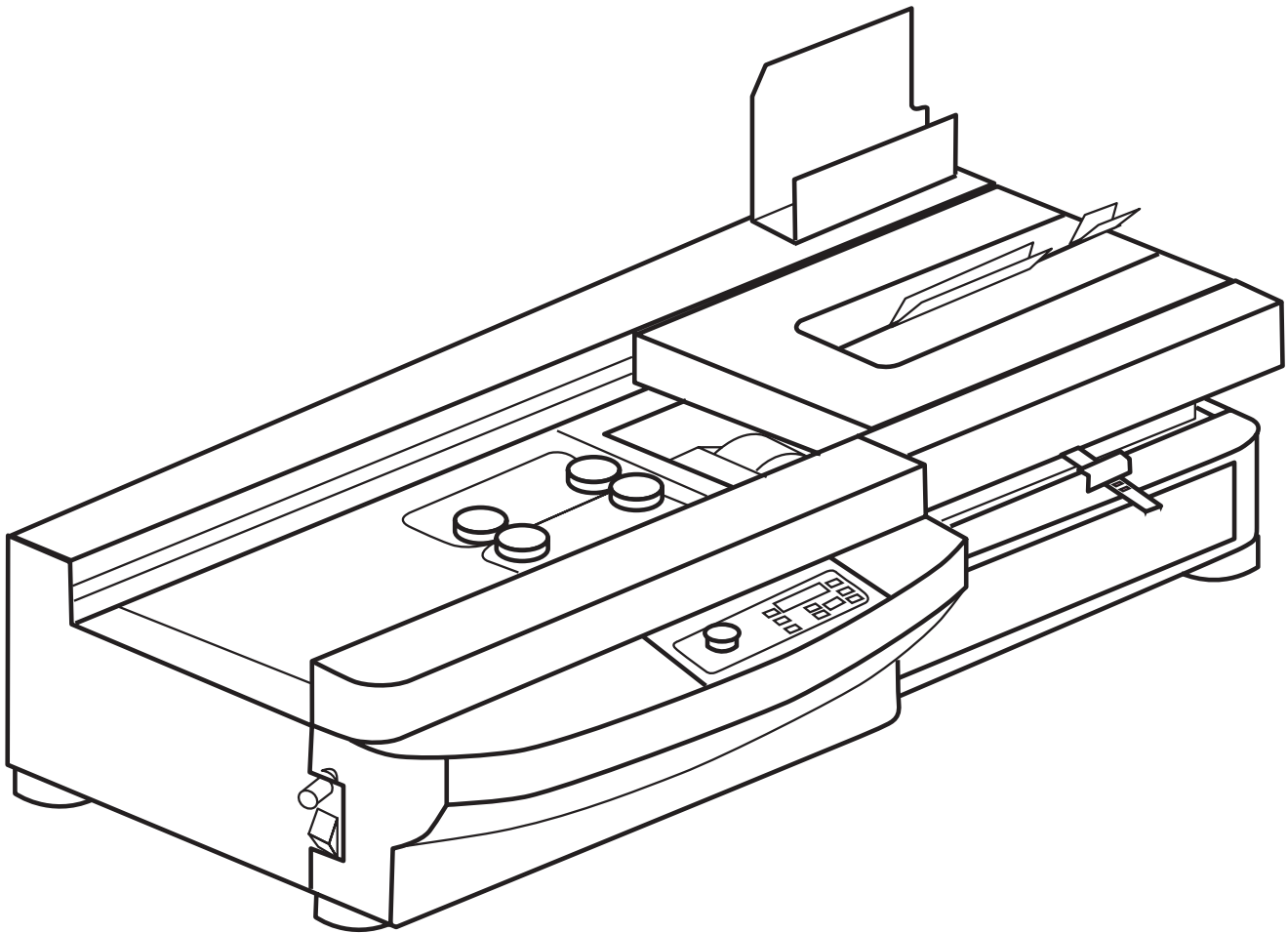


GBC Perfect Binder


Model No. PF3200



Operation Manual

SAFETY MESSAGES

The safety of you and others is very important to GBC. Important safety messages and information are contained within this manual as well as on the machine itself. Please be certain to carefully read and understand all of these before operating the machine.

 The safety alert symbol precedes each safety message in this Operator Manual. This symbol indicates a potential personal safety hazard that could hurt you or others, as well as cause product or property damage.


The following pictorial is found on the PF-3200:



This safety message means that you could be seriously hurt or killed if you open the product and expose yourself to hazardous voltage. NEVER remove the machine's outer cover. ALWAYS refer service requirements to qualified GBC Personnel.


IMPORTANT SAFEGUARDS

- Use the **PF-3200** Binder only for its intended purpose of binding paper and covers according to the indicated specifications.
- Before operating the machine, make certain that the **PF-3200** is placed on a secure, stable work area. This will help prevent the machine from falling and possibly causing personal injury and damage.
- Retain this Operating Instructions manual for later use.

 **CAUTION: IN CASE OF EMERGENCY, USE THE POWER CORD AS A MAIN DISCONNECT.**

- The **PF-3200** must be connected to a supply voltage corresponding to the electrical rating of the machine operating instructions (also listed on the serial number label).
- The socket-outlet shall be located near the equipment and shall be easily accessible.
- The grounding plug is a safety feature and will only fit into the proper grounding type power outlet. If you are unable to insert the plug into an outlet, contact a qualified electrician to have a suitable outlet installed. Do not alter the plug on the end of the cordset (if provided) of the **PF-3200**. It was provided for your safety.
- Unplug the **PF-3200** before moving the machine or whenever the machine is not in use for an extended period of time.
- Do not operate the **PF-3200** if the machine has a damaged power supply cord or plug. Do not operate the machine after any malfunction, if liquid has been spilled into the machine, or if the machine has been damaged in any way.
- Do not overload electrical outlets beyond their capacity. To do so can result in fire or electrical shock.

SERVICE

- Do not attempt to service your **PF-3200** yourself. Contact an authorized GBC service representative for any required repairs or major maintenance for your **PF-3200**.
- There are NO user-serviceable parts inside the machine. To avoid potential personal injury and/or property or machine damage,  **DO NOT REMOVE THE MACHINE'S COVER.**

CLEANING

- You may clean the exterior of the **PF-3200** using a soft, damp cloth. Do not use detergents or solvents as damage to the machine may occur.



MAIN CORDSET SELECTION

(THE FOLLOWING NOTE APPLIES ONLY TO THE UNITS RATED 220V 50HZ.)



CAUTION: WHEN CHOOSING A DETACHABLE LINE CORD FOR USE WITH YOUR PF-3200, ALWAYS OBSERVE THE FOLLOWING PRECAUTIONS:

The cordset consist of three parts; the attachment plug, cordage and appliance inlet. Each of these components must have European regulatory approvals for safety.

The following minimum electrical ratings for the specific cordset are published for safety purposes. **DO NOT USE CORDSETS THAT DO NOT MEET THE FOLLOWING MINIMUM ELECTRICAL REQUIREMENTS.**

PLUG: 3 ampere, 250 volts, 50/60 Hz, Class 1, 3 conductor, European safety approved.

CORDAGE: Type H03VV-F3G0.75, Harmonized (< HAR >). The “< >” symbols indicate cordage approved to appropriate European standard (NOTE: “HAR” may be substituted for approval mark of European safety agency which approved the cordage. An example would be “ < VDE > ”.)

APPLIANCE CONNECTOR: 3 ampere, 250 volts, 50/60 Hz, European safety approved, Type IEC 320. The cordset shall not exceed 3 meters in length. A cordset with component electrical ratings greater than the minimum specified electrical ratings may be substituted.

FCC NOTE

(THE FOLLOWING NOTE APPLIES ONLY TO THE UNITS RATED 115V 60HZ.)

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the Operator Manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his/her own expense.



CAUTION: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY GENERAL BINDING CORPORATION COULD VOID YOUR AUTHORITY TO OPERATE THE EQUIPMENT.

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

EQUIPMENT MAINTENANCE AGREEMENT

By purchasing the **PF-3200**, you have invested in a highly capable binding machine that will give you years of reliable service. To help protect this investment be certain to take advantage of the GBC Equipment Maintenance Agreement (EMA). The EMA provides your **PF-3200** with proper ongoing maintenance and care, helping to ensure the years of quality performance and long life built into the machine. Without an EMA, a charge for time and labor would result from every normal maintenance or repair service call. An EMA for your **PF-3200** eliminates this possibility by providing you with a low, fixed annual cost for protecting your valuable machine investment. For full details about purchasing an EMA, contact your local GBC Branch Office or contact:

General Binding Corporation
500 Bond Street
Lincolnshire, IL 60069

Or Call: 1-800-790-7787

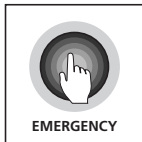
SAFETY INSTRUCTIONS



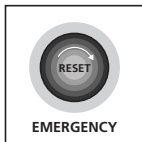
CAUTION: PF-3200 has implemented secondary thermostat to prevent the glue tank temperature from going over 392°F (200°C). When it occurs, the power of PF-3200 will be automatically turned off. You have to wait for the glue tank to cool down before you can restart the machine. If this problem occurs again, call your authorized dealer for service.

In case of EMERGENCY:

1. Press the "EMERGENCY" button when you encounter a problem during operation or bookbinding. This will shut down all the actions of PF-3200, which include the stations and motors. Meanwhile, the LED DISPLAY of the control panel will display and flash the "STOP" symbol.

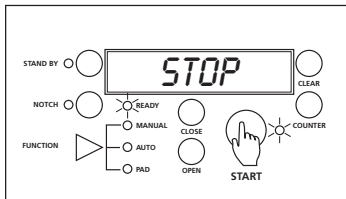


2. Correct the problem. Then turn the "EMERGENCY" stop button to the right in order to reset the machine. The "START" LED will be lit.



Note: You can use "OPEN" and "CLOSE" buttons to open or close the clamp at this time.

3. This will clear the problem on your PF-3200. Press the "START" button to restart your PF-3200. The LED display of the control panel will display and flash "LOAD BOOK".



Note: A. If you receive an error (ERR=Lx), please refer to the Appendix and follow the step 1 to 3 to reset your PF-3200.

B. Call for service if the error message is still there.

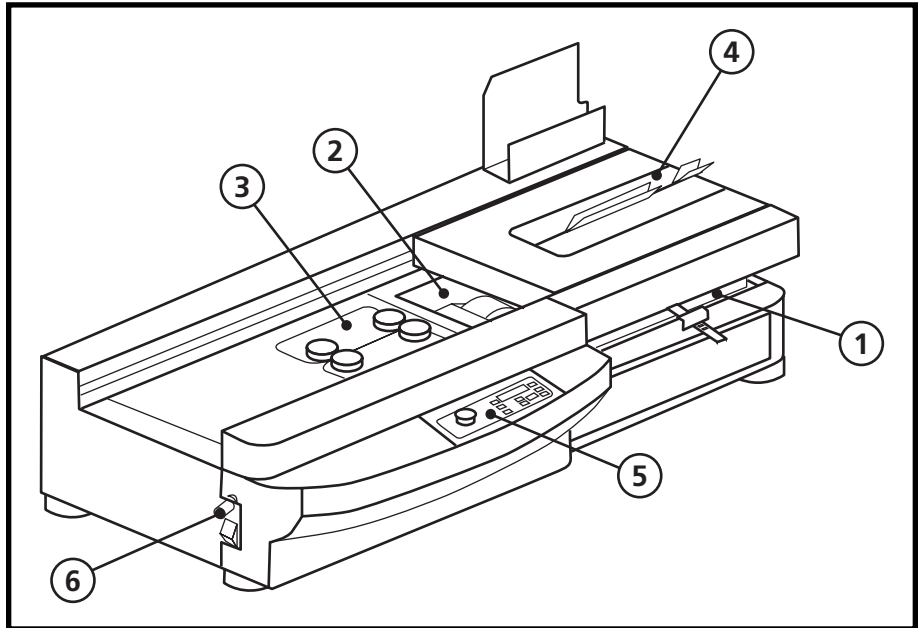


Figure 1

MAIN ASSEMBLIES (Fig. 1)

1. NIPPING STATION
2. GLUE TANK
3. NOTCHING STATION
4. CLAMP STATION
5. CONTROL PANEL
6. NIPPING PRESSURE CONTROL

SPECIFICATIONS

Model	PF-3200 Perfect Binder
Maximum Book Size	12.6" x 15.75" (320mm x 400mm)
Minimum Book Size	3.15" x 1.97" (80mm x 50mm)
Maximum Binding Thickness	1.6" (40mm)
Glue Warm Up	25 minutes (varies depending upon glue type)
Glue Warm Up in Stand-by Mode	5 minutes
Cycle Speed	360 cycles per hour
Production Speed	Up to 200 books per hour
Power Source	110V, 60 Hz (Option: 220V, 50 Hz)
Power Consumption	10 Amps.
Machine Weight	255 LBS (116 Kg)
Machine Dimension	46"(L) x 22"(W) x 15"(H) (1150x560x370mm)

***Having unpacked your PF-3200, you will find the accessories as follows:**

ACCESSORIES

Name	Specification	Quantity
Cover-Sheet Holder		1
Bottom Cover		1
Screw Driver	6" (150mm)	1
Hex Wrench	0.16" (4mm)	1
Hex Wrench	0.24" (6mm)	1

ADHESIVE (Part#1725011: Available in 10 lbs. boxes)

Physical Properties:	
Appearance/Form:	Opaque clear/Chips
Working Temperature:	320°F (160°C)
Working Glue Viscosity:	1,800 CPS @ 320°F (160°C)

INSTALLATION

Note: You must remove the three red shipping brackets before installing your PF-3200.

The procedures for installation:

Step 1:

Remove the red shipping bracket located on the left side of the clamp station as shown. Then reinstall the screws in clamp station.

Step 2:

Remove two red shipping brackets that are located around the nipping station as shown.

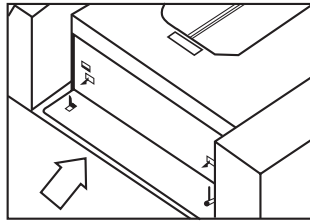
Step 3:

Slide in the glue draining tray underneath the glue tank as shown.

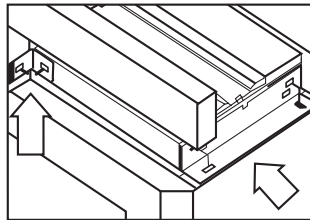
Step 4:

Place your PF-3200 on a safe, firm and solid table. Then mount the cover-sheet holder to the right side of the machine as shown.

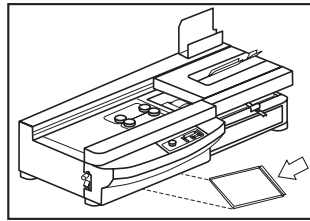
Step 1.



Step 2.



Step 3.



Step 4.

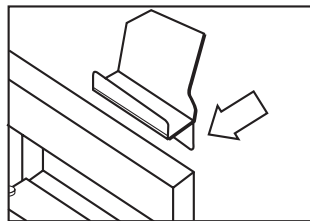
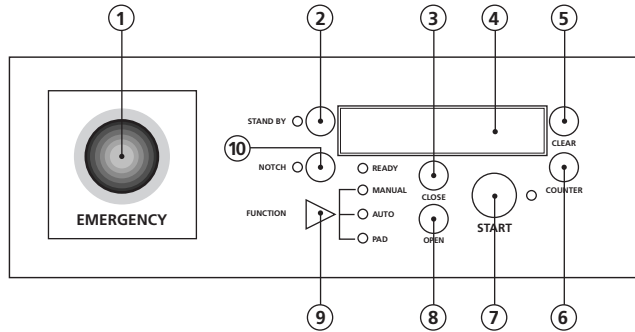


Figure 2

CONTROL PANEL



No.	Symbol	Function	LED Display / Symbol Example
1	EMERGENCY	Stops all the actions of the machine. Except when "HOT" shows on the LED display.	"STOP" (flashing)
2	STAND BY / LED	Temporarily lowers the temperature of glue tank so it won't burn the glue when the machine is not operated.	STBY00
3	CLOSE	Closes clamp.	
4	LED DISPLAY	1. The amount of books bound. 2. Operating status. 3. Perform self-test and stir the hot melt glue. 4. Error messages.	___100 BIND S-TEST ERR = L1
5	CLEAR	Clears the display counter for books bound.	___0
6	COUNTER	Displays the current total amount of binding.	___25
7	START / LED	Indicates the "START" button is ready for proceeding to the next operation.	
8	OPEN	Opens clamp.	
9	FUNCTION / LED	Select one of the function modes – MANUAL, AUTO, or PAD.	One of the mode indicators will be lit.
10	NOTCH / LED	Select the notching function during the bookbinding operation.	

MANUAL MODE

After the "STARTUP" procedures, the PF-3200 will automatically set itself MANUAL operation and flashing "LOAD BOOK" display. Note that the "NOTCH" LED is ON.

1. A. Press the "OPEN" button and place the book block inside the clamps. Be sure to follow the label instructions on the clamp to load the book block to the RIGHT of the red line, then slide the book block to the far LEFT of the clamps and you will see the flashing "PUSH CLOSE" display.
- B. Then press the "CLOSE" button to clamp down the book block and you will see the flashing "PUSH START" display.

Note: In case you need to adjust the book block after you have closed the clamps, you can press the "OPEN" button twice to release it. The LED display will show "PUSH CLOSE". After you have adjusted the book block, you have to press and hold the "CLOSE" button until the clamps close. Then you will see the flashing "PUSH START" display again.

- C. Press the "START" button. The LED display of control panel will show a "←" sign and the clamp station will move over the notching station for notching.
2. After the first notching process, the clamp station will remain to the left side of PF-3200 and the LED display of the control panel will display and flash "LOAD COVER".
 3. Center the cover sheet and adjust the side guide: Measure the width of the book plus half the thickness of the spine. Then set side guide accordingly.
 4. Place the cover on the nipping station, the "START" LED will be lit and flashing "PUSH START". Then press the "START" button to move the clamp station over the nipping station starting the binding process for the book block and cover sheet.

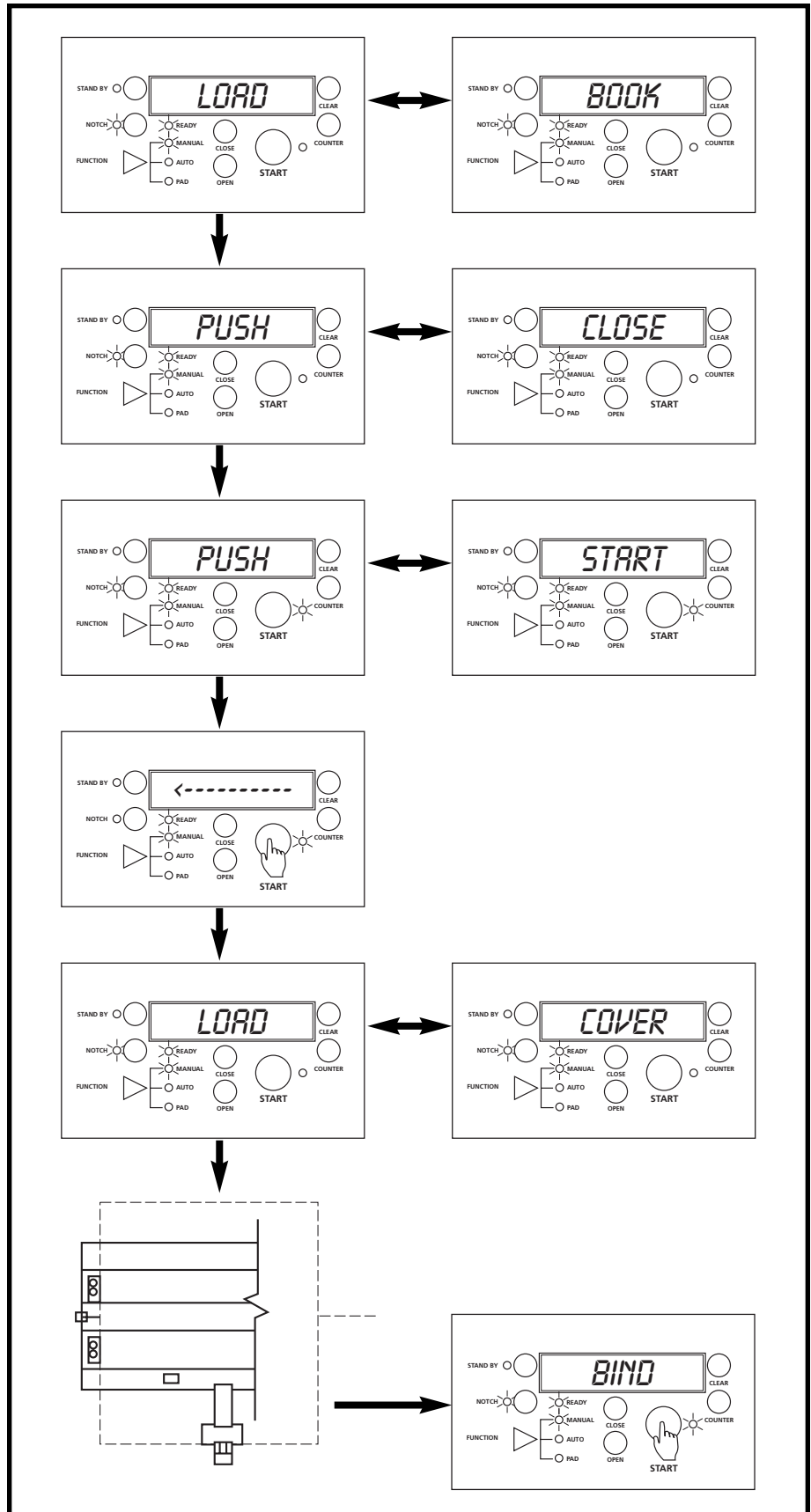


Figure 5

MANUAL MODE (CONT.)

Note: If you accidentally remove or drop the cover sheet during the clamping station returning to the nipping station, the control panel will show “COVER?”. At this moment, you have to place the cover on the nipping station and press “START” button to resume the process.

- When the display indicates “PUSH OPEN”, press the “OPEN” button to open the clamps. Then, remove the finished book from the right end of the clamp station. Having completed one bound book, the LED display of control panel will count once for the total binding amount as shown. Then the control panel will display and flash “LOAD BOOK” for binding next book.
- Repeat step 1 to 5 for more books in “MANUAL” operation.

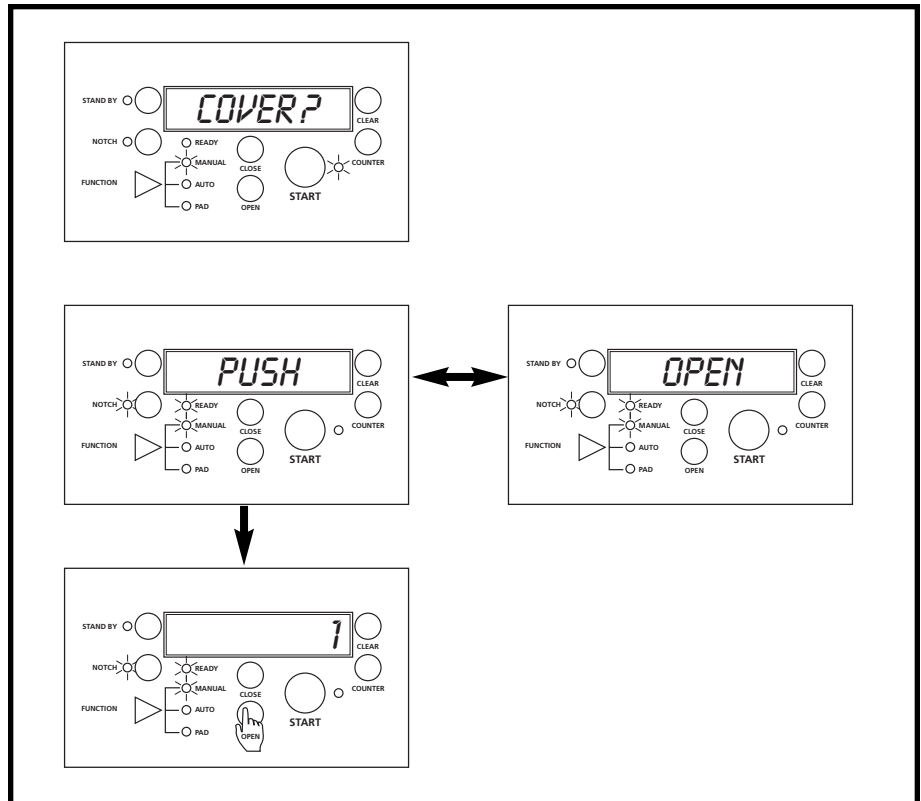


Figure 6

AUTO MODE (CONT.)

Note: If you accidentally remove or drop the cover sheet during the clamping station return to the nipping station, the control panel will show "COVER?". At this moment, you have to place the cover on the nipping station and press "START" button to recover the process.

Having completed one bound book, the clamp will automatically open and display "UNLOAD" so that you can remove the finished book from the right end. Meanwhile, the LED display of control panel will count once for the total binding amount as shown. The **PF-3200** will flash "LOAD BOOK" display.

5. Place the same thickness of book block onto the clamp as the label instructions on the clamp. The clamp station will automatically clamp down the book block and move to the left. Repeat step 3 to 4 for more books in "AUTO" operation.

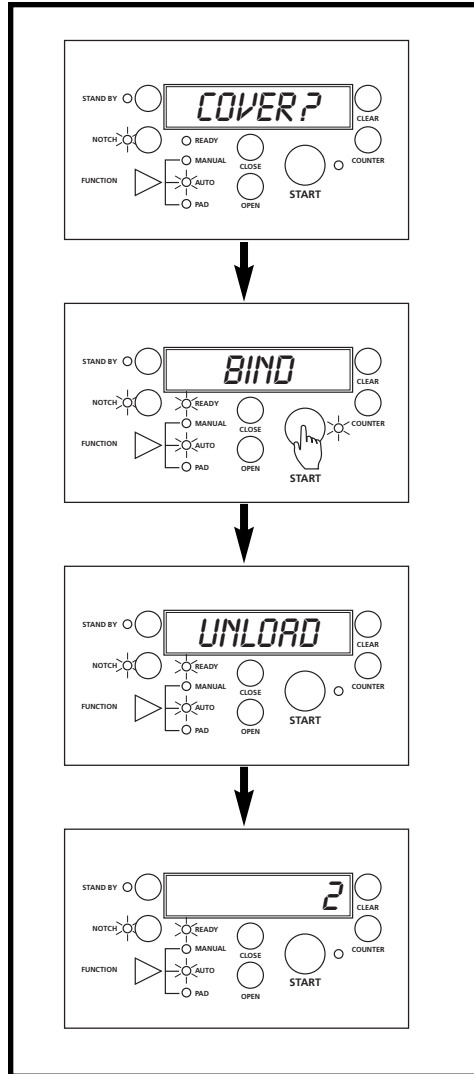


Figure 8

PADDING MODE

“PAD” is one of the **PF-3200** operations that apply to special binding applications such as binding without a cover sheet.

1. Press “FUNCTION” button to switch to “PAD” operation. The “PAD” LED will be lit and display flashing “LOAD PAD” as shown.

Note: The “NOTCH” LED is normally OFF. But you can press “NOTCH” button to actuate it, if desired.

2. A. Press the “OPEN” button. Be sure to follow the label instructions on the clamp to load the pad block to the RIGHT of the red line, then slide the pad block to the far LEFT of the clamps and you will see the flashing “PUSH CLOSE” display.

- B. Then press the “CLOSE” button to clamp down the pad block and you will see the flashing “PUSH START” display.

Note: In case you need to adjust the pad block after you have closed the clamps, you can press the “OPEN” button twice to release it. The LED display will show “PUSH CLOSE”. After you have adjusted the pad block, you have to press “CLOSE” button until the clamps close. Then you will see the flashing “PUSH START” display again.

3. A. Press the “START” button. The LED display of control panel will show a “←” sign and the clamp station will move over the notching station and return to clamp station.

- B. Having moved to the left position of **PF-3200**, the clamp station will automatically move back to the right position and display “BIND”.

- C. Wait for a few seconds until the LED display of control panel displays “PUSH OPEN” as shown.

4. Then press the “OPEN” button to open the clamp so that you can withdraw the bound pad block. Meanwhile, the LED display of control panel will count once for the total binding amount. Then the control panel will display and flash “LOAD PAD” for padding next pad.

Note: If glue is too thick on spine, adjust thickness in accordance with **GLUE ADJUSTMENT** Section.

5. Repeat steps 2 to 4 for more books in “PAD” operation.

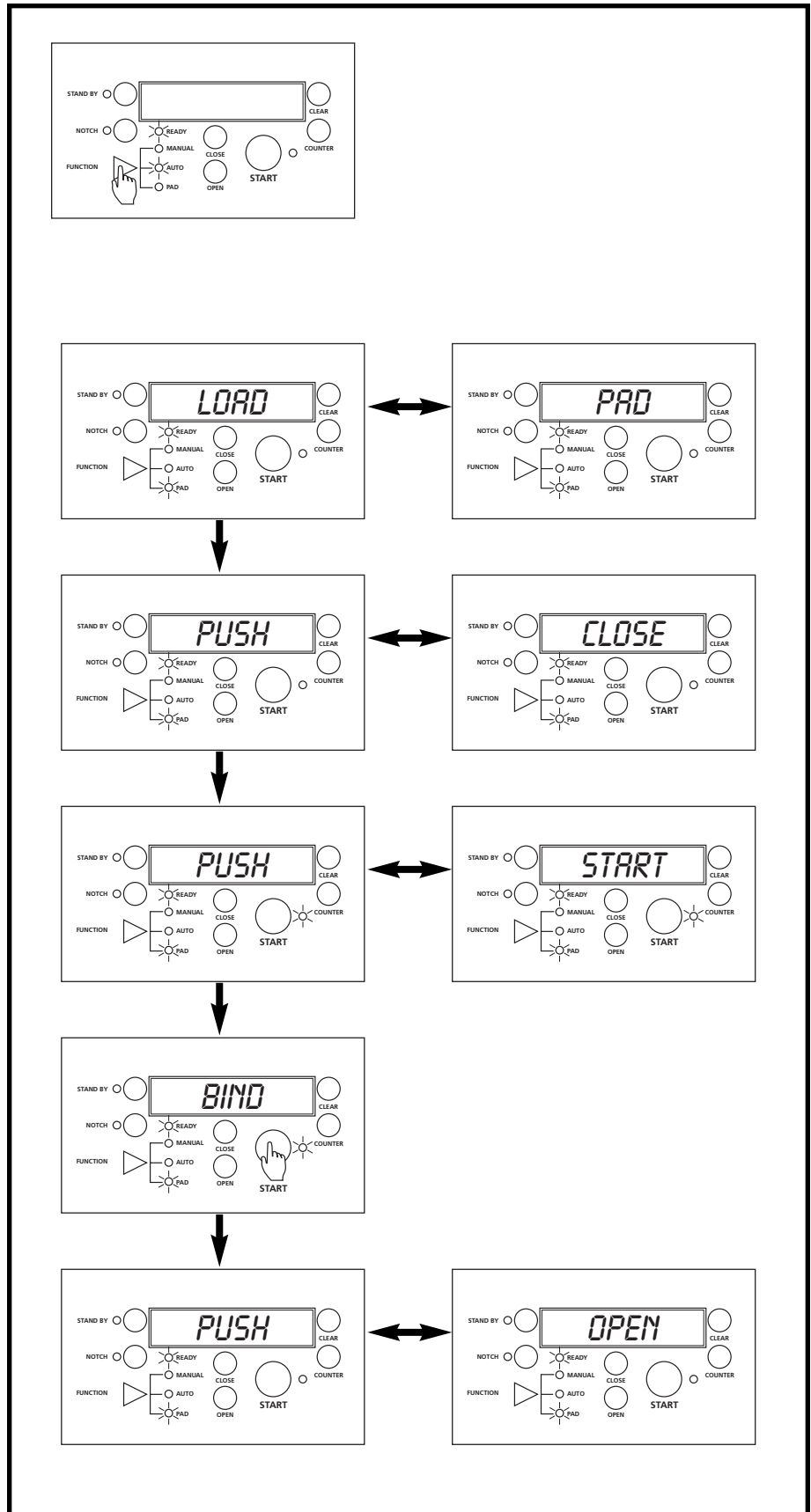


Figure 9

STANDBY MODE

Press "STANDBY" button, the **PF-3200** will temporarily lower the temperature of glue tank so it won't burn the glue when the machine is not operated. The LED displays "STBY00" as shown below. Where "00" is the timer display for the duration of the standby period.

Press "STANDBY" button again when the "STANDBY" LED is on, the **PF-3200** will reheat the glue tank to the working temperature, then the "READY" LED will be lit and waiting for your desired operation.

Note that you have to wait a few minutes when LED displays "WARM00" status. The glue tank of **PF-3200** will be reheated, then the control panel will display and flash "LOAD BOOK" after "HOT" status.

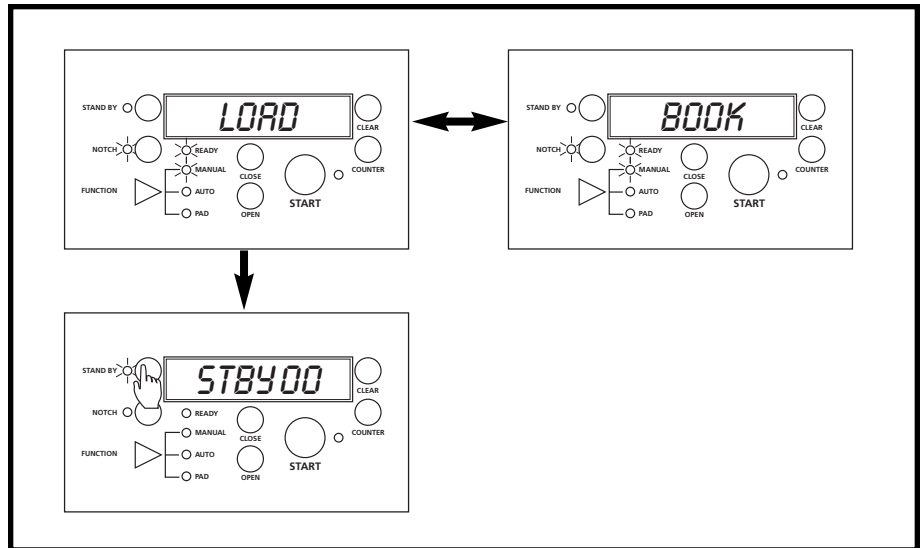
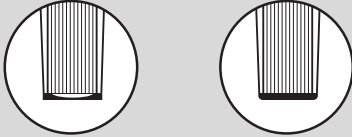


Figure 10

GLUE ADJUSTMENT

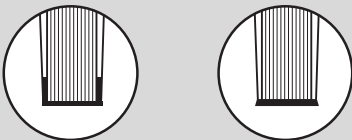
The glue level may require adjustment when the thickness of the book or pad varies. Use the following book spine illustrations for guidelines.

- Increasing the hot-melt glue when



Hollow OR Round

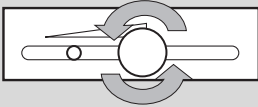
- Decreasing hot-melt glue when



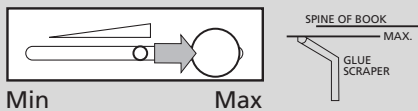
Too much glue on both sides OR Nail head

- Adjusting the glue level:

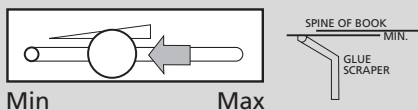
- Turn the glue adjustment lock knob counter clockwise to loosen.



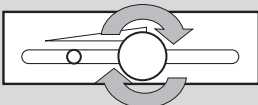
- Increase the amount of glue by sliding the knob to the right at the appropriate position.



Decrease the amount of glue by sliding the knob to the left at the appropriate position.



- Turn the knob clockwise to lock the setting

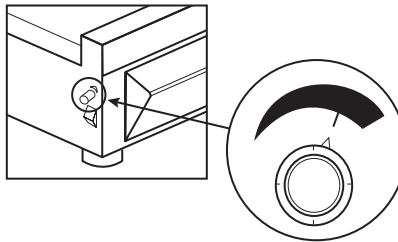


GLUE ADJUSTMENT

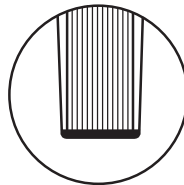
Note that the thickness of the cover sheet is an important factor for you to make a good spine. Use only the suitable thickness of the cover sheet associated with the appropriate glue-meter position to make a good book.

NIPPING PRESSURE CONTROL

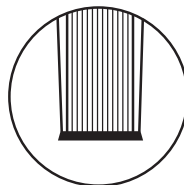
The nipping pressure control knob is located on the left-side of the machine (next to the power switch). It allows you to adjust the nipping pressure based on the thickness of the books and the quality of the book spine. Normally the thinner the books, the more the nipping pressure. The factory setting is set to the mark on the scale.



- Turn the knob clockwise to increase the nipping pressure when round spine occurs or making thinner books.



- Turn the knob counter clockwise to decrease the nipping pressure when nail head spine occurs or making thicker books.



REPLENISHING THE GLUE TANK



CAUTION: GREAT CARE MUST BE TAKEN WHEN HANDLING HOT MOLTEN GLUE. BE SURE NOT TO PLACE AN EXCESSIVE AMOUNT OF GLUE IN THE TANK AT ONE TIME. KEEP IT AT SUCH A LEVEL THAT THE GLUE WILL NOT GO OVER THE MAX. LINE IN THE TANK WHILE THE APPLICATION DRUM IS ROTATING. THIS WILL PREVENT GLUE FROM SPILLING OUT OF THE TANK.

Glue Replacement:



WARNING: DO NOT ATTEMPT TO REMOVE THE DRAINING TRAY UNTIL THE GLUE COOLS DOWN.

- Warm up the **PF-3200** as described in the **STARTUP** section on page 5.
- Make sure the draining tray is covered by Aluminum foil and positioned underneath the glue tank so that the tank drains into it.
- Use the 6 mm Allen wrench to open (Counter Clockwise) the glue drain plug, which is located on top of the glue tank.
- Close (Clockwise) the glue drain Allen screw when the glue stops flowing. Wait until the draining tray cools down. Carefully empty the draining tray and put a new Aluminum foil on it. Reposition tray and continue draining the glue tank.
- Fill the glue tank with new glue up to the Max. line.
- Remove the glue drain tray and discard the cold solidified drained glue.

Note that it's not necessary to drain the glue frequently if the machine is used constantly under normal working conditions. However, in case the glue has been left unused for a long period of time with the unit in the "ON" position, and the quality is found to be unacceptable, use the glue replacement procedures or call your authorized dealer.

MAINTENANCE

After you have finished using the binder for the day, follow the following steps:

1. Close the clamps while the LED display flashing "LOAD BOOK" or "LOAD PAD".
2. Press "START" and "CLEAR" keys simultaneously. The clamp station will automatically move to the left of the machine and LED display "NP SVC".
3. Clean the residual glue that might be on the nipping plates and plate surfaces.
4. Press the "START" and "CLEAR" keys, the clamp station will return to its home position. Open the clamps to the maximum position.
5. Turn the **PF-3200** off. Clean the clamp surfaces and wax them.

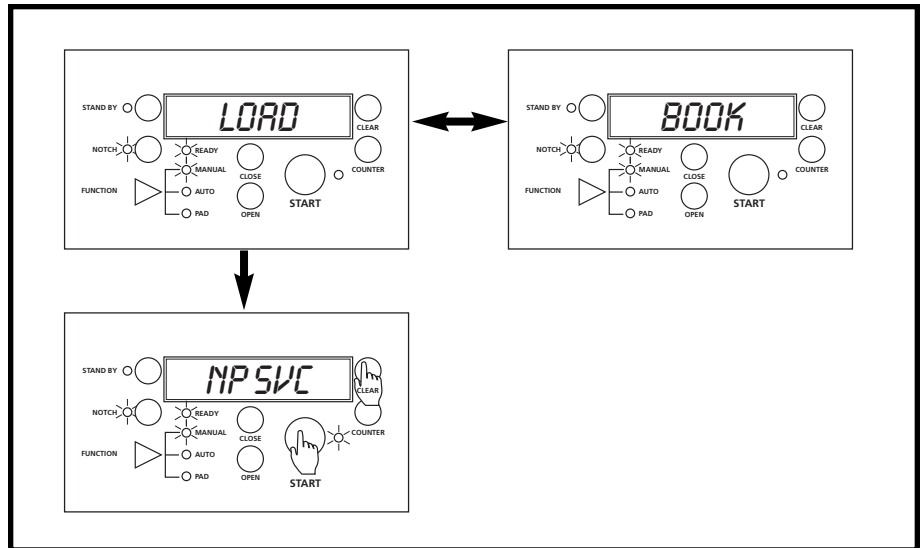


Figure 11

SETUP FOR TIMERS

To enter the timer setup menu, you will need to press and hold down both the "OPEN" and "CLOSE" buttons, then turn the power on. You should see "SET TR" in the LED DISPLAY. Press the "FUNCTION" button to sequentially display TR1, TR2, TR3, TR4, TR5, TR6, "SAVE", "CANCEL", and "RESET". Once you have selected the setting to change, you need to press the "OPEN" to increase the time and the "CLOSE" to decrease the time within their ranges. Press "FUNCTION" button until you see "SAVE" in the LED DISPLAY. Then press the "START" button to change it. Or select "CANCEL" and press "START" button to exit. To return all settings to default, please use "RESET" followed by "START" button to recover the factory settings.



CAUTION: WE ONLY RECOMMEND YOU TO CHANGE TR1.

DEFAULT TIMES FOR TRx

Name	Default Time	Range	Description
TR1	4 sec.	2.0 - 10 sec.	Nipping time.
TR2	1 sec.	0.5 - 5 sec.	Auto mode: After loading the cover, the delay time before clamp station returns.
TR3	2 sec.	1.0 - 5 sec.	Auto mode: Clamp closing time for the book.
TR4	1 sec.	0.5 - 5 sec.	Auto mode: Clamp opening time for the book.
TR5	.5 sec.	0.5 - 5 sec.	Auto mode: The clamp detecting time right after closing.
TR6	5 sec.	3.0 - 10 sec.	Padding mode: The closing time of clamp before opening it.

The fastest speed of settings that AUTO mode can perform is: TR1 = 2 sec., TR2 = 0.5 sec., TR3 = 1 sec., TR4 = 0.5 sec., TR5 = 0.5 sec.

Note that the book making speed depends on thickness of the book and the loading technique for the paper and cover.



General Binding Corporation
Northbrook, IL 60062-4195
<http://www.GBC.com>